

豫隆工业无线遥控器使用说明书

F21 系列 F21-2S/2D, F21-4S/4D, F21-E1, F21-6S, F21-6D

F23 系列 F23-A++, F23-BB

F24 系列 F24-8S/8D, F24-10S/10D, F24-12S/12D, F24-14S/14D, F24-16S/16D, F24-18S/18D, F24-20S/20D, F24-21S

F26 系列 F26-80

一. 保证

我公司保证本产品出厂时, 完全符合其所公布的各项规格, 只要适当的安装, 都可以正常使用, 但是我公司并不保证本产品的操作是毫无中断或零错误。

本产品自出厂日起享有一年的质保期, 保证客户在一年内不会有任何产品上的问题, 若在质保期内, 只要证明产品质量有瑕疵, 我公司愿意维修。任何需要修护的产品, 都必须送到我公司指定的服务处, 该客户必须负担产品运往服务处的单程运费, 而我公司的服务处在质保期内将会负担回程运费, 寄还该产品。

未包含事项

前述的保证范围, 并未包含按键、继电器、保险丝、电池等损耗性零件或因装机错误所造成的电路损坏等, 且未包含因客户不当使用、不可抗拒原因、天然因素、维护不足、操作环境规格的忽略、未经许可的变更、错误的使用或客户自行修改设置介面而造成的故障。

备注

**前述的保证事项, 并无其它明述或隐含的保证事项。

**保证所提供的赔偿是客户唯一的赔偿, 我公司并不负任何直接、间接、特殊、意外或因果的损毁责任。

二. 注意事项

一般注意事项

**未经专业培训的人员, 不得拆开本产品, 否则可能损坏及造成人员受伤;

**使用后天车总电源应关闭, 以切断接收机电源, 并将发射器的钥匙开关拔除或者按下蘑菇头急停按钮;

**天车应有总电源继电器、极限开关, 及其它安全性设施。

安装注意事项

1. 接收机安装位置必须远离变频器、马达等大功率电器和高压线等强电磁环境, 其连接电缆越远越好, 以避免接收机受到杂讯干扰;
2. 接收机不可安装在电控箱内, 正确的安装方式是将接收机固定在电控箱顶部(或外部)的适当位置, 然后再将接收机的输出电缆穿入电控箱内做恰当的接线;
3. 本系列遥控有 40 亿组安全码, 出厂时各安全码设定均不相同, 但安装时仍必须确认同一工作地区不能有相同安全码的遥控器, 以避免相互影响而产生误动作;
4. 200 米范围内不可以使用相同频道的设备, 以避免无线电相互干扰。

三. 紧急状况处理

当紧急状况出现时, 请依下列步骤处理, 并立刻通知经销商:

1. 按下紧急停止(STOP)按键;
2. 将发射机的钥匙开关拔出(如有), 有些机型采用的是急停按钮+授权码方式, 并没有钥匙;
3. 关闭天车总电源;
4. 通知经销商, 找出原因。

四. 平常操作

1. 将电量饱满的 AA 型(5 号)电池以正确方向装入发射机的电池仓;
2. 依设定的开机模式开机; (注: 未开机时发射机上 LED 指示灯会快速闪烁红灯)

3. 按照发射机上各按键所设定的功能正确操作；
4. 操作完毕依下列顺序处理。
 - (1) 按下紧急停止钮；
 - (2) 将旋转式钥匙开关逆时针方向转至 OFF 位置，并拔除收藏妥当；(或拔除磁性钥匙，授权码机型则无此操作)
5. 如果长时间不使用，请将电池取出。

五. 发射机电池的使用

发射机使用两颗 5 号(AA)电池，禁止使用充电电池。当电池电压饱满时，按下发射机按键，发射机 LED 指示灯为绿灯闪烁；反之当电池使用一段时间之后，电池电压不足时，发射机 LED 指示灯则为红灯闪烁(彻底没电时 LED 指示灯不亮)，此时发射机将无法继续操作，必须立即更换电量充足的电池。(此处的绿灯、红灯闪烁，均为安全钥匙放在正确的位置，且急停按钮打开，且按开机键后的状态)

六. 接收机的电源选择

所有机型都有两种电压版本供选择：

1. 交流(AC)12V-440V、直流(DC)20V-440V 版本
2. 交直流(AC/DC)10V-220V 版本

七. 发射机与接收机的匹配方法

本公司所有机型出厂时发射机与接收机均已经匹配好，但仍然具备现场匹配的功能，以备用户不时之需：

1. **匹配发射机** 配对前准备工作：磁铁钥匙放好或者急停打开，接收器断电；
 - ①同时按住“开机”、“关机”、“下”三个按键，等待发射机上的 LED 绿灯常亮；
 - ②LED 绿灯常亮后，依次松开“下”键、“开机”键、“关机”键(“下”键必须先松开)，此时发射机进入配对状态；
 - ③接收机通电 2 秒内按一下发射机的“上”键(此时接收机数据发送给发射机)，绿灯熄灭配对成功；
2. **匹配接收机** 配对前准备工作：磁铁钥匙放好或者急停打开，接收器断电；
 - ①同时按住“开机”、“关机”、“下”三个按键，等待发射机上的 LED 绿灯常亮；
 - ②LED 绿灯常亮后，依次松开“下”键、“开机”键、“关机”键(“下”键必须先松开)，此时发射机进入配对状态；
 - ③接收机通电 2 秒内按一下发射机的“下”键(此时发射机数据发送给接收机)，绿灯熄灭配对成功；
3. **两个发射机①②之间相互匹配** 配对前准备工作:发射机①②磁铁钥匙放好或者急停打开；
 - (1) 同时按住“开机”、“关机”、“下”三个按键，等待 LED 绿灯常亮；
 - (2) LED 绿灯常亮后，依次松开“下”键、“开机”键、“关机”键(“下”键必须先松开)，此时发射机进入配对状态；
 - (3) 按照(1)(2)步骤操作使发射机①②都进入配对状态；
 - (4) 发射机①的数据复制到发射机②：按一下发射机②的“上”键，发射机②的绿灯熄灭红灯常亮，然后按一下发射机①的“上”键，发射机②的红灯熄灭，复制成功，此时发射机①的红灯常亮，重新装电池即可恢复；发射机②的数据复制到发射机①同理。

八. 工作模式设定方法

本公司所有机型都具备多种工作模式，出厂时默认点动互锁模式，用户可以根据自己的实际应用场景自行设定自己想要的工作模式，需要说明的是设定是以两个键为一组设定的(例如“上下”键是一组)，设定方法如下：

1. 接收机通电；

2. 发射机磁铁放好或者急停打开；
3. 先按住“关机”键，再按住“开机”键，保持按住两个键不松手；
4. 待发射机上的 LED 绿灯常亮后，先松开“开机”键，再松开“关机”键，此时进入设定状态；
5. 以设定“上下”键的模式为例，如下按“上”键对应次数 选择需要的模式；
6. 按“下”键确认，绿灯熄灭，完成设定。

功能键模式：

- 0 次：“点动点动互锁”模式 1（“上”键点动“下”键点动“上下”键相互抑制）
- 1 次：“点动点动不互锁”模式 2（“上”键点动“下”键点动“上下”键不相互抑制）
- 2 次：“自锁自锁互锁”模式 3（“上”键自锁“下”键自锁“上下”键相互抑制）
- 3 次：“自锁自锁不互锁”模式 4（“上”键自锁“下”键自锁“上下”键不相互抑制）
- 4 次：“开关”模式 5（“上键”开“下”键关，此模式下继电器无效）
- 5 次：“点动自锁互锁”模式 6（“上”键点动“下”键自锁“上下”键相互抑制）
- 6 次：“点动自锁不互锁”模式 7（“上”键点动“下”键自锁“上下”键不相互抑制）
- 7 次：“自锁点动互锁”模式 8（“上”键自锁“下”键点动“上下”键相互抑制）
- 8 次：“自锁点动不互锁”模式 9（“上”键自锁“下”键点动“上下”键不相互抑制）

开机键模式：

- 0 次：“开机键开机”模式 1；
- 1 次：“任意键开机”模式 2；
- 2 次：“RO 自锁开机键开机”模式 3；
- 3 次：“RO 自锁任意键开机”模式 4；

示例：设置“上键”自锁，“下”键点动，“上下”键不互锁，任意键开机，“东”键开，“西”键关；按“上”键 8 次选择模式 9，按“开机”键 1 次选择“开机键模式”的模式 1，按“东”键 4 次选择模式 5。

九. 授权码机型的操作

授权码机型操作说明：除“急停键”“关机键”外的任何按键都可以作为密码键，密码为四位密码。启用授权码功能后，只有输入正确密码后才能开机正常操作发射机。急停按下后下次打开急停再次操作发射机时必须重新输入密码。当密码输入错误导致无法开机时，按下急停后再打开急停，重新输入正确密码。

授权码设定

1. 接收机断电；
2. 发射机急停打开；
3. 长按“开机”“关机”“上”三个按键不松手；
4. 待发射机上的 LED 指示灯呈现绿灯常亮后，先松开“上”键“开机”键，最后松开“关机”键，此时发射机处于授权码设定状态；
5. 输入四位密码；
6. 按下急停，设定完成。

十. 保险丝的更换方法

接收机断电的前提下，请使用一字螺丝刀，先将保险丝的一头撬起，再将保险丝取出。装入新保险丝时，将保险丝压入保险丝座即可。

十一. 正确的操作步骤

1. 接收机正确安装接线完毕并通电；
2. 发射机急停打开或者磁性钥匙放在正确位置上；
3. 按发射机绿色“开机键”开机；

4. 操作功能键（此时绿灯指示，长按按键时绿灯以 1 秒的速度闪烁）。

十二. LED 指示灯故障信息表示

1. 发射机装上电池后不操作任何按键，发射机 LED 指示灯即为红色快速闪烁状态，此情况为按键卡死或者主板故障，请通知经销商处理；
2. 发射机 LED 指示灯呈现红色灯快速闪烁，可能有下列情况：
 - A. 急停按钮未打开或磁性钥匙未放在正确位置上；
 - B. 未依设定的开机方式正确开机。
3. 发射机 LED 指示灯呈现黄色灯或红灯一直亮，此情况为发射机记忆体故障，请联络经销商处理；
4. 发射机 LED 指示灯呈现红色灯慢速闪烁，此情况为电池欠压，请更换电池；
5. 发射机 LED 指示灯呈现绿色灯慢速闪烁，此情况为正常工作状态。

十三. 简易的故障排除方法

1. 当操作错误或不正常操作时，导致发射机 LED 指示灯一直亮红灯，此时请将电池取出后数秒再装回，然后重新操作发射机；
2. 当接收机无法动作时，请关掉接收机电源超过 20 秒后，重新送电。

十四. 接收机接线图解说

本系列工业用无线遥控器的接点输出均为无源继电器触点，使用者可依照实际需要自行规划设计。

Yulong industrial wireless remote control instruction manual

F21 series F21-2S/2D, F21-4S/4D, F21-E1, F21-6S, F21-6D

F23 series F23-A++, F23-BB

F24 series F24-8S/8D, F24-10S/10D, F24-12S/12D, F24-14S/14D, F24-16S/16D, F24-18S/18D, F24-20S/20D, F24-21S

F26 series F26-80

【One】 pledge

Our company guarantees that when this product leaves the factory, it fully conforms to the published specifications, and all can be used normally if properly installed, but our company does not guarantee that the operation of this product is without interruption or zero error.

This product enjoys a one-year warranty period from the factory date, ensuring that customers will not have any product problems within one year, if within the warranty period, as long as the product quality is defective, our company is willing to repair. Any product that needs repair must be sent to the service office designated by our company. The customer must bear the one-way freight of the product to the service office, while the service office of our company will bear the return freight within the warranty period and return the product .

No items included

The aforementioned guarantee scope, does not include the keys, relay, fuse, battery, or circuit damage caused by installation error, and does not include improper use, irresistible reasons, natural factors, insufficient maintenance, neglect of operating environment specifications, unauthorized change, wrong use, or the customer to modify the interface.

Remarks

* * The foregoing warranties have no other warranty stated or implied.

* * The compensation provided by the guarantee is the only compensation of the customer, and our company shall not be liable for any direct, indirect, special, accidental or causal damage.

【Two】 matters need attention

General precautions

* * Personnel without professional training shall not open this product, otherwise it may damage and cause injury;

* * After using, The main power supply of the crane should be turned off to cut off the power supply of the receiver, and remove the key switch of the transmitter or press the emergency stop button of the mushroom head;

* * The crane should have the main power supply relay, the limit switch, and other safety facilities.

Installation precautions

**The installation position of the receiver must be far away from the frequency converter, motor, etc., and the farther the connection cable, the better, to prevent the receiver from receiving interference from other electromagnetic waves;

**The receiver can not be installed in the electric control box, the correct installation method is to fix the receiver at the top of the electric control box (or external) of the appropriate position, and then put the output cable of the receiver into the electric control box to do the appropriate wiring;

**This series of remote control has 4 billion sets of safety codes, each safety code setting is different when leaving the factory, but the installation must still confirm that the same working area cannot have the same safety code remote control, in order to avoid mutual influence and misoperation;

**Equipment with the same channel can not be used within 200 meters to avoid mutual radio interference.

【Three】 Emergency handling

In case of emergency, please follow the following steps and notify the dealer immediately:

**Press the Emergency Stop (STOP) button;

**Pull out the key switch of the transmitter (if any), some models use the emergency stop button + authorization code mode, and no key;

**Turn off the total power supply of the crane; Inform the dealer and find out why.

【Four】 Normal operation

**Install the full power of AA type (No.5) battery into the battery compartment of the transmitter in the correct direction;

** Power on according to the set boot mode; (Note: The LED indicator on the transmitter flashing red light quickly when it is not turned on)

**Operation correctly according to the functions set by each key on the transmitter;

**After the operation, follow the following order.

Press the emergency stop button;

Turn the rotary key switch counterclockwise to the OFF position and remove it properly; (or remove the magnetic key without the authorization code model)

** If not used for a long time, please remove the battery.

【Five】 Use of the transmitter batteries

The transmitter uses two 5 (AA) batteries, and rechargeable batteries are prohibited. When the battery voltage is full, when the transmitter button is pressed, the transmitter LED light is green; otherwise, when the battery voltage is insufficient, the transmitter LED light is red (The LED indicator light is not on when the power is completely out), the transmitter will be unable to continue operation, and the battery must be replaced immediately.(The green and red lights flicker here, all is the security key is placed in the correct position, and the emergency stop button is opened, and the state after pressing the power-on key)

【Six】 Power supply selection of the receiver

There are two voltage versions available for all models:

**AC 12V-440V, DC 20V-440V version

**AC / DC 10V-220V version

【Seven】 Matching method between transmitter and receiver

All models of the company have been matched between the transmitter and the receiver, but they still have the function of on-site matching in case of emergency:

****Matching transmitter** Preparation before matching transmitter: the magnet key is placed or emergency stop (STOP) is open, the receiver is power off;

- ① At the same time, hold down the "START", "STOP", "DOWN" three buttons, waiting for the LED green light to always come on;
- ② After the LED green light is always on, release the "DOWN" button, "START" button and "STOP" button in turn (the "DOWN" button must be released first), at this point the transmitter enters the pending matching state;
- ③ Press the transmitter "UP" button within 2 seconds after the receiver is energized (at this point the receiver data is sent to the transmitter), and the green light is off and the pairing is successful;

****Match receiver** Preparation before matching receiver: the magnet key is placed or emergency stop (STOP) is open, the receiver is power off;

- ① At the same time, hold down the "START", "STOP", "DOWN" three buttons, waiting for the LED green light to always come on;
- ② After the LED green light is always on, release the "DOWN" button, "START" button and "STOP" button in turn (the "DOWN" button must be released first), at this point the transmitter enters the pending matching state;
- ③ Press the transmitter "DOWN" button within 2 seconds after the receiver is energized (at this point the transmitter data is sent to the receiver), the green light is off and the pairing is successful;

****The two transmitters' ①② match each other** Preparation work before pairing: transmitter ①② magnet key placed or emergency stop (STOP) is open;

- (1) At the same time, hold down the "START", "STOP", "DOWN" three buttons, waiting for the LED green light to always come on;
- (2) After the LED green light is always on, release the "DOWN" button, "START" button and "STOP" button in turn (the "DOWN" button must be released first), at this point the transmitter enters the pending matching state;
- (3) Follow the (1)(2) steps to make the transmitter ①② into the paired state;
- (4) Copy the data of transmitter ① to the transmitter ②: press the "UP" button of transmitter ②, the green light of transmitter ② goes out and the red light always turns on, then press the "UP" button of transmitter ①, and the red light of transmitter ② goes out and copied successfully, at this time, the red light of the transmitter ① is always on, and reinstall the battery can be restored; Copy the data of transmitter ② to the transmitter ① similarly.

【Eight】 Working mode setting method

All models of the company have a variety of working modes, the factory default point move interlock mode, users can set your own working mode according to your actual application scenario, it should be explained that the setting is set by two keys for a group (for example, "up and down key" is a group), the setting method is as follows:

****Receiver energized;**

****The transmitter magnet is placed or the emergency stop button is opened;**

****First press the "STOP" key, then press the "START" key, keep hold the two keys do not let go;**

**After the LED green light is always on, first release the "START" button, then release the "STOP" key, at this point it enters the set state;

**Take the mode of "UP and DOWN" key as an example, press "UP" key to the corresponding number of times to select the required mode;

7. **Press the "Down" key to confirm that the green light is off, and complete the setting.

0 times: "Dot move Dot move interlock" mode 1("UP" key point move"DOWN" key point move"Up and down" key inhibit each other)

1 times: "Dot move Dot move not interlock" mode 2("UP" key point move"DOWN" key point move"Up and down" key do not inhibit each other)

2 times: "self-lock self-lock interlock" mode 3("UP" key self-lock"DOWN" key self-lock"Up and down" key inhibit each other)

3 times:"self-lock self-lock not interlock" mode 4 ("UP" key self-lock"DOWN" key self-lock"UP and DOWN" key do not inhibit each other)

4 times:"Switch" mode 5("UP" key on"DOWN" key off, this mode"DOWN" relay invalid)

5 times: Dot move self-lock interlock" mode 6 ("UP" key point move"DOWN" key self-lock"UP and DOWN" key inhibit each other)

6 times: "Dot move self-lock no interlock" mode 7 ("UP" key point move"DOWN" key self-locking"UP and DOWN" key do not inhibit each other)

7 times: "self-lock Dot move interlock" mode 8 ("UP" key self-lock"DOWN" key point move"UP and DOWN" key inhibit each other)

8 times: "self-lock Dot move not interlock" mode 9 ("UP" key self-lock"DOWN" key point move"UP and DOWN" key do not inhibit each other)

"START"key model:

0 times: "START key power on" mode 1;

1 times: "any key power on" mode 2;

2 times: "R0 self-lock START key power on" mode 3;

3 times: "R0 self-lock any key power on" mode 4;

Example: Set the "UP" key self-lock, "DOWN" key Dot move, "UP and DOWN" key no interlock,any key power on, "EAST" key on, "WEST" key off; press "UP" key 8 times to select mode 9, press "START" key 1 times to select "START"key model's mode 1, press "EAST" key 4 to times select mode 5.

【Nine】 Operation of the authorization code model

Authorization code model operation instructions: except "emergency stop key" "STOP "key any key can be used as a password key, the password is four password. After the authorization code function is enabled, the transmitter can be started normally only after the correct password is entered. After the emergency stop, the password must be entered again. When the password input error leads to the impossible to boot, press the emergency stop and then open the emergency stop, and re-enter the correct password.

Authorization code setting

**Receiver power off;

- **Transmitter emergency stop key opened;
- **At the same time, hold down the "START", "STOP", "UP" three buttons, waiting for the LED green light to always come on;
- **After the LED indicator light is always on, first release the "UP" button and "START" button, and finally release the "STOP" button, at this time, the transmitter is in the authorization code setting state;
- **Enter a four-digit password;
- **Press the emergency stop, and the setting is complete.

【Ten】 Replacement method of the fuse

If the receiver is in power off, please use a one-line screwdriver to pry up one end of the fuse and then remove the fuse. When loading a new fuse, press the fuse into the fuse seat.

【Eleven】 Correct operation steps

- **The receiver is correctly installed and connected and energized;
- **The transmitter stops sharply to open or the magnetic key is placed in the correct position;
- **Press the transmitter green "START" button to start up;
- **Operation function key (the green light flashes at a 1-second rate when the long buttons are pressed).

【Twelve】 LED indicator light fault information representation

- **The transmitter does not operate any keys after loading the battery, and the transmitter LED indicator is red fast flash state. In this case, the button is stuck or the motherboard fails, please notify the dealer to deal with it;
- **The transmitter LED indicator shows a red flash flashing flash flashing with the following conditions:
 - A. The emergency stop button is not opened or the magnetic key is not placed in the correct position;
 - B. Not properly started according to the set boot mode.
- **Transmitter LED indicator light shows the yellow light or the red light is always on, this case is the transmitter memory fault, please contact the dealer for handling;
- **The transmitter LED light flashes red light slowly. In this case, the battery is under voltage, please replace the battery;
- **The transmitter LED light is slowly flashing green light, which is in normal working condition.

【Thirteen】 Simple troubleshooting method

- **When the operation is wrong or abnormal, the transmitter LED light is always red. Please remove the battery for a few seconds before installing it back and operate the transmitter again;
- **When the receiver cannot act, turn off the power of the receiver for more than 20 seconds and then power again.

【Fourteen】 Explanation of the receiver wiring diagram

The contact output of this series of industrial wireless remote control is passive relay contacts, and users can plan and design according to the actual needs.

FCC Warning

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE 1: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

NOTE 2: Any changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.